Table of Contents

7 WATER DISCHARGE

Synopsis
This section is promulgated to ensure NOAA facilities/work sites and ships comply with the National Pollutant Discharge Elimination System (NPDES)and international agreements with regard to discharges of water used by the facility/work site or ship.

The section applies to all NOAA facilities, work sites and ships that discharge water, sewage and/or industrial type wastewater or perform exterior renovations that may affect storm water quality.

Initial Implementation Requirements:

- **Appoint a Program Coordinator**
- **Compare Site/Facility Operations with the Requirements of this Section**
  - Determine if "Pollutants" are Discharged Via a "Point Source" by the Site/Facility (7.5)
  - Determine How the Site/Facility Discharges Wastewater
    - direct discharge
      - obtain an individual or general NPDES Permit (7.5.3)
    - discharge to a POTW
      - obtain a POTW Pretreatment Permit for Industrial Wastewater Discharges (7.5.4a)
      - obtain a special permit if required by the POTW (7.5.4b)
  - Obtain a Storm Water Permit
    - if operations are regulated by the EPA or State as "Industrial Activity." (7.7)
    - if construction activity will disturb one or more acres of land (7.7.2)
  - Abide by General Storm Water Permit Rules if Storm Water Discharges to Regulated Municipal Separate Storm Sewer System (MS4) (7.7.2)

Recurring and Annual Task Requirements:

- **If Facility has NPDES Discharge or Storm Water Permit**
  - **Review Conditions to Ensure Compliance**
    - **perform testing as required**

Checklist

7 Water Discharge	YES	NO	N/A
1. Does the facility or work site discharge wastewater to the "waters of the U.S."? (7.5)	_____	_____	____
2. Does the facility or work site have a NPDES permit?	_____	_____	____
a. If yes, are procedures in place to assure compliance with the conditions of the permit? (7.5.2)	_____	_____	____
3. Does the facility or work site discharge to a Publicly-owned treatment works?	_____	_____	____
a. If yes, does this discharge require a POTW-issued permit? (7.5.4)	_____	_____	____
b. Are procedures in place to assure compliance with the conditions of this permit? (7.5.4)	_____	_____	____
4. Does the facility or work site discharge sewage to a Septic System? (7.6)	_____	_____	____
a. If yes, have NOAA employees been advised concerning the limitations of the system? (7.6.2)	_____	_____	____
5. Does the facility or work site have a storm water discharge permit? (7.7)	_____	_____	____
a. Do NOAA personnel perform construction industrial or maintenance activities that could result in discharge of contaminated storm water? (7.7.2)	_____	_____	____
b. Are facility/work site employees prohibited from automobile maintenance activities in facility/work site parking lots? (7.7.3)	_____	_____	____

7 WATER DISCHARGE

7.1 Purpose and Scope

Because of its potential to carry and spread contamination throughout the environment, the discharge of wastewater used for cooling, cleaning or sanitary purposes is regulated within the United States by a program created by the Environmental Protection Agency (EPA) called the National Pollutant Discharge Elimination System (NPDES). For discharge of wastewater from a ship, Federal, State, local and/or international agreements may dictate what, where and how this discharge may occur.

Whether wastewater flows into a sewer, septic system or is directly discharged into a body of receiving water, it usually is subject to some level of regulation depending on a number of factors.

This section is designed to provide NOAA employees guidance to ensure compliance with the provisions of the NPDES Program and, where necessary, the international requirements.

The section applies to all NOAA facilities and work sites that discharge water directly to the waters of the U.S., international waters, a publicly-owned treatment works or a septic system. It also applies to all NOAA facilities that discharge collected precipitation to a storm water drainage system (i.e. use storm drains).

7.2 Definitions

Designated Person - a NOAA employee assigned the task of coordinating the water discharge program. This role need not be assigned to the Facility Environmental Coordinator. It may be assigned to another NOAA employee.

Designated Responsible Official (DRO) - the senior NOAA official on-site. This official has authority over operations or activities which are subject to environmental and worker safety statutes. The responsibility of the DROs is inherent in their position and need not be formally designated or ascribed.

Facility Environmental Coordinator (FEC) - the individual responsible for ensuring the activities carried out at a facility are conducted in accordance with Federal, state and local environmental regulations. Typically, each NOAA facility will have a designated FEC who is also responsible for compliance with occupational safety and health requirements. In the NWS, this individual is identified as the Environmental and/or Safety Focal Point

MARPOL - a commonly used term used to denote the international regulations promulgated by the International Maritime Organization (IMO). Annexes I and II deal with the Discharge of Oil and Hazardous Substances into the ocean, and Annex V deals with the Discharge of Garbage and Plastics at sea. Although the United States has not yet

adopted Annex IV which deals with the Discharge of Sewage, US vessels are subject to parallel requirements promulgated by the Coast Guard under 33 CFR 159.

Point Source - any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

Pollutants - dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials [except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et. seq.)], heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water.

Publicly-Owned Treatment Works - the local sewage treatment plant.

7.3 Acronyms Employed in This Section

DRO	-	Designated Responsible Official
EPA	-	Environmental Protection Agency
FEC	-	Facility Environmental Coordinator
MARPOL	-	Maritime Pollution (International Convention for the Prevention of Pollution from Ships)
MSD	-	Marine Sanitation Device
MS4	-	Municipal Separate Storm Sewer System
NPDES	-	National Pollutant Discharge Elimination System
POTW	-	Publically-Owned Treatment Works
RECO	-	Regional Environmental Compliance Officer
WQA	-	Water Quality Act

7.4 Regulatory Requirements

7.4.1 Federal Program

Under the Clean Water Act of 1972 which was amended in 1977 and 1982, and again by the Water Quality Act (WQA) in 1987 and 1989, the EPA has created a regulatory program called the National Pollutant Discharge Elimination System (NPDES). Using this program, the EPA created a permit system for controlling the discharge of water back to the environment. In addition, to control the pollution of the waters surrounding the United States (US), the US Coast Guard has also created a set of regulations which control the discharge from ships within preset distances from the shores of the US.

7.4.2 State /Local Programs

Most of the States have EPA-authorized programs to manage the NPDES within the State. NOAA facilities and work sites will need to check with the Regional Environmental Coordinator or the Safety/Environmental Coordinator (SECO), if applicable, and/or the NOAA Regional Environmental Compliance Officer to determine State requirements. In addition, many States that border navigable water have enacted regulations governing the discharge of pollutants into the water within their jurisdiction. Some ports have also created a "no discharge zone" and other port-specific restrictions. Contact the RECO and/or Regional Environmental Coordinator or SECO for assistance in determining the applicable requirements.

7.5 Point Source Discharges

Within the NPDES Program, any point source that discharges pollutants to the "waters of the United States" is required to obtain a permit for that discharge. Permits granted under the program provide two levels of control: technology-based limits (which are based on the ability of dischargers in the same industrial category to treat wastewater) and water quality-based limits (which are used if the technology-based limits are not sufficient to protect a body of water). Understanding the meaning of the terms "point source," "pollutant" and "waters of the United States" is the key to the program.

A ***point source*** is defined as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged." In other words, a point source is a place where a representative sample of the water can be taken before it mixes with the receiving water.

The definition of the term ***pollutant*** includes solid waste, garbage, chemical wastes, heat, rock, sand and even cellar dirt. The term is purposely broad in scope to include anything that is added or mixed into the water.

The term ***Waters of the United States*** includes:

a. navigable waters
b. tributaries of navigable waters
c. interstate waters, the oceans out to 200-miles
d. intrastate lakes, rivers and streams which are:

(1) used by interstate travelers for recreation and other purposes;
(2) sources of fish or shellfish sold in interstate commerce; or
(3) utilized for industrial purposes by agencies engaged in interstate commerce.

7.5.1 Possible NOAA Point Sources

Within a NOAA facility or work site, there may be several "point sources" that discharge "pollutants," hence the need to review how they are regulated.

Some typical point source discharges at NOAA land-based facilities include:

a. treated sanitary wastes
b. roof drains
c. drains from secondary containment areas
d. sump pump discharges
e. storm and parking lot drainage systems
f. boiler blowdown water.

Some typical point source discharges from ships include:

a. sewage and graywater
b. ballast water
c. solid waste and garbage
d. oil and oily wastes
e. runoff from hull, deck and superstructure produced during cleaning and maintenance
f. boiler blowdown water

While discharges of sewage, industrial wastes and other pollutants into a public-owned treatment works (POTW) (i.e. local sewage treatment plant) by both land-based facilities and ships is excluded from regulation by the EPA and most States, these discharges are normally regulated by the POTW which is in-turn regulated by the EPA or State under the terms of its permit to discharge to the "waters of the U.S." Depending on the type of process the POTW employs, permission or a permit from the POTW may be required for the discharge of materials like the antifreeze-water mixtures, clean-up solvents, spent formalin or flushes of spills of corrosive materials.

7.5.2 NPDES Discharge Permits for Land-Based NOAA Facilities

Most land-based NOAA facilities and work sites do not require permits under the NPDES Program since they only discharge sewage to a local POTW. A permit is also not required for NOAA facilities that use a septic system approved by a local authority (i.e. the Health Department) and only discharge sewage to this system.

If a facility discharges wastewater or has a treatment system and discharges the treated sewage directly to a stream, lake, river, pond or other collection of water, the Regional Environmental/Safety Coordinator (if applicable)and the NOAA

Regional Environmental Compliance Officer (RECO) must be contacted to determine if a permit is required and if so, advice on how to prepare the permit application.

NOAA facilities/work sites with a NPDES Permit must carefully observe all restrictions and/or conditions imposed by the permit.

7.5.3 NPDES Permits

A permit is typically a license for a facility to discharge a specified amount of a pollutant into a receiving water under certain conditions; however, permits may also authorize a POTW to process, incinerate, landfill, or beneficially use sewage sludge. The two basic types of NPDES permits issued are individual and general permits.

An *individual permit* is a permit specifically tailored to an individual facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). The authority issues the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapply prior to the expiration date.

A *general permit* covers multiple facilities within a specific category. According to the NPDES regulations in 40 CFR Part 122.28, general permits may be written to cover categories of point sources having common elements, such as:

a. storm water point sources;
b. facilities that involve the same or substantially similar types of operations;
c. facilities that discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
e. facilities that require the same effluent limits, operating conditions, or standards for sewage sludge use or disposal; and
f. facilities that require the same or similar monitoring.

General permits may be issued to dischargers within a specific geographical area such as city, county or state political boundaries; designated planning areas; sewer districts or sewer authorities; state highway systems; standard metropolitan statistical areas; or urbanized areas. NOAA facilities or work sites may be part of a general permit which is granted to an airport, university campus or other multiple agency site or facility where the NOAA facility or work site is one of many operations on the site. If a general permit is granted to a site on which a NOAA facility or work site is located, the conditions of the permit are binding on all organizations involved - including NOAA.

. Major Components of a Permit

All NPDES permits, at a minimum, consist of five general sections:

(1) *Cover Page* - Typically contains the name and location of the permittee, a statement authorizing the discharge and the specific locations for which a discharge is authorized.

(2) *Effluent Limits* - The primary mechanism for controlling discharges of pollutants to receiving waters. Permit writers spend the majority of their time deriving appropriate effluent limits based on applicable technology-based and water quality-based standards.

(3) *Monitoring and Reporting Requirements* - Used to characterize waste streams and receiving waters, evaluate wastewater treatment efficiency and determine compliance with permit conditions.

(4) *Special Conditions* - Conditions developed to supplement effluent limit guidelines. Examples include: best management practices (BMPs), additional monitoring activities, ambient stream surveys, and toxicity reduction evaluations (TREs).

(5) *Standard Conditions* - Preestablished conditions that apply to all NPDES permits and delineate the legal, administrative and procedural requirements of the permit.

Every permit contains these five basic sections, but the contents of sections will vary depending on whether the permit is issued to a municipal or industrial facility and whether the permit will be issued to an individual facility or to multiple dischargers (i.e., a general permit).

b. Overview of the Permitting Process

While the limits and conditions in an individual NPDES permit are unique to the permittee, the process used to develop the limits and conditions and then issue the permit generally follows a common set of steps. The order of these steps may vary depending on whether the permit is an individual or general permit. A general description of the permitting process for individual and general permits is presented below.

(1) Individual Permits

As specified in 40 CFR Part 124, the major steps for a permit writer to develop and issue an individual NPDES permit are:

(a) Receive application from permittee.

(b) Review application for completeness and accuracy.

(c) Request additional information as necessary.

(d) Develop technology-based effluent limits using application data and other sources.

(e) Develop water quality-based effluent limits using application data and other sources.

(f) Compare water quality-based effluent limits with technology-based effluent limits and choose the more stringent of the two as the effluent limits for the permit.

(g) Develop monitoring requirements for each pollutant.

(h) Develop special conditions.

(i) Develop standard conditions.

(j) Consider variances and other applicable regulations.

(k) Prepare the fact sheet, summarizing the principal facts and the significant factual legal, methodological and policy questions considered in preparing the draft permit including public notice of the draft permit, and other supporting documentation.

(l) Complete the review and issuance process.

(m) Issue the final permit.

(n) Ensure permit requirements are implemented.

The NPDES permitting process begins when the operator of the facility (permittee) submits an application. After receiving the application and making a decision to proceed with the permit, the permit writer reviews the application for completeness and accuracy. The permit writer then begins to develop the draft permit and the justification for the permit conditions.

The first major step in the development process is deriving technology-based effluent limits.

Following the development of effluent limits, the permit writer develops appropriate monitoring and reporting conditions, facility-specific special conditions and includes standard conditions that are the same for all permits.

After the draft permit is complete, the permitting authority provides an opportunity for public participation in the permit process. A public notice announces the permit and interested parties may submit comments regarding the draft permit. Based on the comments, the permitting authority then develops the final permit, with careful attention to documenting the process and decisions for the administrative record, and issues the final permit to the facility.

(2) General Permits

The process for developing and issuing general NPDES permits is similar to the process for individual permits, however, there are certain differences in the order of events. The permitting authority first identifies the need for a general permit by collecting data demonstrating that a group or category of dischargers has similarities that warrant a general permit. In deciding whether to develop a general permit, permitting authorities consider the following:

(a) Are there a large number of facilities to be covered?

(b) Do the facilities have similar production processes or activities?

(c) Do the facilities generate similar pollutants?

(d) Do only a small percentage of the facilities have the potential for violations of water quality standards?

The remaining steps of the permit process are the same as for individual permits. The permitting authority develops the draft permit and fact sheet, issues a public notice, addresses public comments, documents the issues for the administrative record and issues the final permit. After the general permit has been issued, facilities that wish to be covered under the general permit generally submit a Notice of Intent (NOI) to the permitting authority. The permitting authority may then either request additional information describing the facility, notify the facility that it is covered by the general permit, or require the facility to apply for an individual permit.

(3) Who grants a NPDES to a NOAA facility/work site?

EPA is authorized under the CWA to directly implement the NPDES Program. The EPA, however, may authorize States, Territories or Tribes to implement all or parts of the national program. As a result, most of the States, Territories or Tribes have applied for authorization to implement the base program (i.e., issue individual NPDES permits for industrial and municipal sources) and additional parts of the national program including:

(a) Permitting of Federal facilities;
(b) Administering the National Pretreatment Program; and/or
(c) Administering the Municipal Sewage Sludge Program.

If the State, Territory or Tribe has been granted only partial authority (e.g., only the base NPDES permit program), the EPA will implement the other program activities. For example, if a State has an approved NPDES Program, but has not received EPA approval for the State's Municipal Sewage Sludge Program, the EPA Regional Office would be responsible for ensuring conditions to implement the Standards for the Use or Disposal of Sewage Sludge (40 CFR Part 503) were included in NPDES permits issued to POTWs in that State. The EPA may issue a separate NPDES permit with the applicable sewage sludge standards and requirements, or may negotiate with the State on joint issuance of NPDES permits. The same process also applies where a State, Territory or Tribe has not received approval for permitting Federal facilities. In this case, the EPA would grant the NPDES Permit to a NOAA facility.

In general, once a State, Territory or Tribe is authorized to issue permits or administer a part of the program, EPA no longer conducts these activities. However, EPA must have an opportunity to review each permit issued by the State, Territory or Tribe and may formally object to elements that conflict with Federal requirements. If the permitting agency does not address the objection points, EPA will issue the permit directly. Once a permit is issued through a government agency, it is enforceable by the approved State, Territorial, Tribal and Federal agencies (including EPA) with legal authority to implement and enforce the permit and is also enforceable by private citizens (in Federal court).

If the State, Territory or Tribe does not have approval for administering the NPDES program, EPA will operate the NPDES program. When EPA issues the permit, Section 401(a) of the CWA

requires that EPA obtain certification from the State where the discharge will occur to ensure that the discharge will be in compliance with effluent limits, the State's water quality standards, and "any other appropriate requirement of State law." Section 401(d) requires the State to list in the certification the conditions that must be included in the permit to implement the certification.

7.5.4 POTW Permits for NOAA Facilities

a. Industrial Wastewater Treatment/Pretreatment Permits

For certain industrial processes, the EPA requires the wastewater that results from the process to be pretreated prior to discharge to a POTW. If a NOAA facility or work site uses any of the processes regulated by the EPA as listed in 40 CFR Chapter I, Subchapter N (Parts 400-471), the facility will be required to pretreat its wastewater and monitor the effluent to ensure it meets the effluent limitations for the regulated point source category.

b. Special POTW Permits/Permission for NOAA Facilities

Sometimes, NOAA facilities and ships that discharge to a publicly-owned treatment works (POTW) are required by the POTW to apply for, obtain and maintain a special permit to discharge to the POTW. For example, the discharge of the water from the activation of the radiosonde batteries or the spent formalin solution may require such a permit or permission. Often these are simply a letter of acknowledgement in which the POTW grants permission to discharge a special wastewater if the NOAA facility, work site or ship adheres to specific conditions. These documents are normally only required if an operation discharges or could discharge a pollutant that could cause an upset to the treatment process used by the POTW or otherwise cause a problem for the POTW adhering to the conditions required by its NPDES permit.

Some NOAA facilities, which are located in areas where groundwater is a primary source of drinking water, are required to obtain a POTW permit for their discharge into a lift station (sewage pump) which in turn, discharges into the POTW sewer pipes. The permit is designed to record the flow of wastewater into the system. If a significant decrease in flow is detected, an investigation is initiated to ensure a leak hasn't occurred which could contaminate the groundwater.

Most NOAA facilities and work sites using a POTW will not be required to obtain a special POTW permit however, this is a decision made by the local POTW based on the processing employed to treat the sewage.

7.6 NOAA Discharges to Septic Systems

Some NOAA facilities and work sites use on-site septic systems to treat the sewage generated on-site.

These systems are normally designed to biologically treat the sewage using an underground concrete settling tank and a leach field. The tank separates solids from liquids and allows the solids to biologically degrade into water soluble products which then flow by gravity into the leach field with the liquid wastes and then are allowed to seep into the ground for further biological degradation and filtration. To assist facilities that use a septic system, the EPA has produced the manual "Decentralized On-site Wastewater Treatment Systems" which is available to be viewed or downloaded from www.epa.gov/seahome/decent.htm.

7.6.1 Permits

Normally, a septic system does not require a "permit" to operate. They do, however, usually require an approval from a local health agency (i.e. the Health Department) prior to installation. This approval is normally based on both the engineering design of the system and the ability of the soil to handle the predicted flow of treated water from the system. To determine the porosity of the soil, a "percolation test" is typically required in areas where the soils have a high clay content which would reduce or prevent water flow.

Some NOAA facilities use a biological treatment system (similar to a septic tank) to treat the sewage and then use the treated water for irrigation. These facilities are required to obtain a NPDES permit for the discharge of the treated water.

7.6.2 Maintenance

Because septic systems rely on a biological process and porous soil, care must be taken to ensure the system does not suffer an "upset" in which the bacteria that make the system work are killed. As a result, all NOAA employees using the system must be informed that:

(a) the facility/work site uses a septic system

(b) nothing other than food scraps and human wastes are allowed to be flushed into the system.

7.7 NOAA Storm Water Permits

To address the occasional release of pollutants into the environment due to precipitation, the EPA has expanded the NPDES permit program to include the release of harmful pollutants to the environment via storm water.

The EPA recognized that roofs can be contaminated with particles that settle out of the air or drop from an exhaust vent and parking lots are often the site of numerous oil, antifreeze, brake fluid or fuel leaks. Also, construction activity can remove vegetation which allows the soil to be washed off. When a significant precipitation event (rain) occurs, contamination can be quickly washed off into the storm water system which eventually will lead back to the "waters of the U.S."

Storm water systems are normally uncontrolled drainage systems designed to remove rain or melted snow off roofs and parking lot surfaces. These systems are designed to drain water off quickly but untreated and as a result, contamination from these surfaces can degrade water quality.

7.7.1 EPA Storm Water Program

The EPA Storm Water Program was implemented in two phases. Phase I of the program regulated large municipal storm water systems, industrial activities and construction activities involving more than 5 acres. As a result, only large, industrial-like facilities such as the NWS National Data Buoy Center (NDBC) faced possible regulation under the Storm water Permit Program. Under Phase I, the National Aeronautical and Space Administration (NASA) who is the "landlord" for the NDBC site, was granted a storm water permit. As a result, the NDBC must follow the NASA rules for the management of the storm water produced on-site.

7.7.2 Phase II

Phase II of the Federal Storm Water Program, effective March, 2003, requires the NPDES permitting of Municipal Separate Storm Sewer Systems (or MS4s). MS4s are defined to include municipalities and local sewer districts, State and Federal Departments of Transportation, universities, hospitals and even Federal sites such as military bases and correctional facilities. Because the definition of a small MS4 excludes "separate storm sewers in very discrete areas such as individual buildings," most NOAA facilities and work sites will not require a storm water permit.

Large NOAA facilities or those located at a larger site such as a university campus will be regulated, however, and will be required to manage their storm water as required by the host.

While the Phase I rules required a storm water permit for operators of construction activities that disturb five or more acres of land, the Phase II rules changed this lower limit to one acre.

As a result, if a construction project involving one or more acres is planned, a storm water permit to control run-off will be required and thus must be part of the early planning process. Lack of this permit can cause a project shutdown until it is obtained which could cause a significant delay.

The Storm Water Program is usually a State-managed effort which allows the States great latitude in which activities it chooses to regulate. As a State becomes more confident with their efforts in this program, other NOAA facilities could become targeted for regulation.

7.7.3 NOAA Facility/Work Site Program

In addition to ensuring the storm water Phase II rules are followed for construction activity, Designated Responsible Officials must enact and enforce local policies that prohibit activities that can create violations of these rules. For example, one NOAA RECO requests that employees be prohibited from changing the oil or antifreeze in both government and personal vehicles in the facility/work site parking lot. Inadvertent spills of these materials may result in a violation of the storm water permit and a subsequent enforcement action.

7.8 Discharge at Sea

The requirements for managing wastes while on a ship at sea are significantly different from those for land-based facilities. As a result, NOAA personnel serving on these vessels and the visiting NOAA scientific personnel must be informed of what they can and cannot do while on the vessel.

7.8.1 Sewage Discharge Standards

Discharge of sewage within 3 nautical miles of land is not allowed unless the sewage is treated using an approved Marine Sanitation Device (MSD). While Type I MSD's are allowed if they were installed prior to January 31, 1978, when replacement is required, an approved Type II or III MSD must be used. Section 9-3-1 of Safety Standards for Ships of the NOAA Fleet details the requirements for MSDs.

7.8.2 Graywater Discharge

To minimize the amount of water to be treated, good marine practice requires that graywater must be segregated from sewage to the maximum amount possible.

Except in certain port areas where State or local requirements have established "no discharge" zones, graywater can usually be discharged overboard without treatment

7.8.3 Discharge to a POTW

NOAA ships cannot discharge any pollutant to a POTW that would cause an interference with the treatment process or a violation of the permit standards for the POTW. Normally this includes pollutants that create a fire or explosion hazard, cause corrosive structural damage, have a pH below 5.0 or are solid enough to cause physical blockage in the sewer pipes. If a vessel inadvertently discharges anything that could cause a problem, the treatment works must be notified immediately.

7.8.4 Ballast Water Discharge

The discharge of ballast water is subject to controls by the International Maritime Organization (IMO), the U.S. Coast Guard (USCG) and the U.S. Navy.

The Marine Environmental Protection Committee of the (IMO) has developed "Guidelines for Preventing the Introduction of Unwanted Aquatic Organisms and Pathogens from Ship's Ballast Water and Sediment Discharges" (IMO 1993). These guidelines recommend ballast exchange in at least 2000-feet of water (deep ocean) prior to entering a port to remove non-indigenous organisms picked up in ballast water at a previously visited port. The Coast Guard also requires deep ocean ballast water exchange for all vessels entering the Great Lakes and upper Hudson River. Both the Coast Guard and the Navy have adopted the practice of exchanging ballast water outside the 12 nautical mile limit prior to entering a U.S. port upon return from a foreign port. As a good marine practice, NOAA vessels should also follow this practice.

7.8.5 Garbage and Solid Waste

The Ocean Dumping Act prohibits the transportation of material from the United States for the purpose of dumping it into the sea. The law does not apply to the discharge of wastes generated onboard a ship while it is underway. Trash, garbage or food wastes cannot be disposed overboard within 3 miles of land. No trash, garbage, food wastes or incinerator ash can be disposed overboard when the ship is between 3 and 12 nautical miles of the nearest land unless the waste is ground and can pass through a screen with a mesh opening of 25 millimeters. Dunnage, lining or packing materials cannot be disposed within 25 nautical miles of land. All nondegradable materials must be punctured (holed) and weighted to assure immediate sinking. Plastics cannot be discharged. The dumping of medical wastes in peacetime is strictly prohibited - except under emergency conditions.

7.9 Responsibilities

7.9.1 NOAA Headquarters (NOAA)

a. The NOAA Environmental/Safety Office shall perform an annual assessment of the NOAA headquarters facilities to ensure that the facilities are in compliance with this section.

b. The NOAA Environmental/Safety Office shall periodically perform an assessment of the regional headquarters and field offices to ensure compliance with this section. The frequency of these regional and field office assessments shall be determined by the NOAA Environmental/Safety Office.

c. Requests for clarification concerning this section shall be directed to the NOAA Environmental/Safety Office.

7.9.2 Regional or Operating Unit Environmental/Safety Coordinator

a. Shall monitor and coordinate to promote compliance with the requirements of this procedure for the regional headquarters and field offices or operating units.

b. Shall perform an annual assessment of the regional headquarters facilities or operating unit to monitor and promote compliance with the requirements of this section.

c. Shall perform assessments or designate personnel to perform assessments of all field offices to monitor and promote compliance with the requirements of the section.

7.9.3 Designated Responsible Official

a. Shall have oversight over the implementation of this section and ensure that the requirements of this section are followed by individuals at the NOAA facility.

b. Shall ensure that sufficient personnel and funding are available to enable compliance with all applicable requirements of this section.

c. Shall ensure that procedures are developed at NOAA field offices for managing and monitoring, if necessary, all discharges of water and storm water from the facility.

d. Shall ensure NOAA employees follow the requirements of this section.

e. Shall review or delegate review of this section on an annual basis to ensure that the facility is complying with its requirements. Confirmation of this review shall be forwarded to the Regional or Operating Unit Environmental/Safety Coordinator.

7.9.4 Facility Environmental Coordinator, Environmental and/or Safety Focal Point or Designated Person

a. Shall ensure that any tasks delegated to them by the Designated Responsible Official are implemented in accordance with the requirements of this section.

7.9.5 Employees

a. Individual employees affected by this section are required to read, understand and comply with the requirements of this section.

b. Report all violations of the requirements of this section to their supervisor or Safety Focal Point.

7.10 References

Incorporated References

The following list of references is incorporated as a whole or in part into this section. These references can provide additional explanation or guidance for the implementation of this section.

7.10.1 U.S. Environmental Protection Agency

a. "Water Permitting 101," http://www.epa.gov/npdes/pubs/101pape.htm.

(1) 40 CFR 122.28 "General permits"

(2) 40 CFR 124 "Procedures for Decisionmaking"

(3) 40 CFR Subchapter N - "Effluent Guidelines and Standards"

(4) 40 CFR 503 "Standards for the Use or Disposal of Sewage Sludge"

7.10.2 **Office of Marine and Aviation Operations**

a. Ship Environmental Compliance Protocol

b. Environmental Compliance & Guidance Manual

c. NOAA Fleet Medical Policy Manual "Handbook on Sanitation of Vessels in Operation"

7.10.3 **U.S. Coast Guard**

a. 33 CFR 151 - "Vessels Carrying Oil, Noxious Liquid Substances, Garbage, Municipal or Commercial Waste, and Ballast Water"